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10/566,395	01/30/2006	Takaki Shimura	Q92594	3611
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/566,395

Applicant(s)

SHIMURA ET AL.

Examiner

BRUK A. GEBREMICHAEL

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 04/02/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following office action is a **Final Office Action** in response to communications received on 04/30/2010. Currently, claims 1-31 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1-3, 6-12, 14-16, 19-22, 24-26, 28-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of Papadopoulos 6,099,320.

Regarding claim 1, Shimura discloses the following claimed limitations; a dementia inspection apparatus comprising an answer obtaining section and a dementia degree inspecting section (see FIG 9), wherein the answer obtaining section obtains answers from a subject to a first examination chart and a second examination chart (Para.0157, lines 1-5), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination whether a color of the characters constituting the color word is the same color as the color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining

whether the determination is correct or error (Para.0148); the answers to the first examination chart are to be made within a first predetermined answer time limit by the subject reading the inspection sentences (Para.0178); and the dementia degree inspection section determines a dementia degree representing a degree of dementia of the subject based on the answers obtained by the answer obtaining section (Para.O056).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected; the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 20-26 and lines 57-63); the answers to the second examination chart are to be made by the subject based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart (col.5, lines 58-67 and col.6, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in

order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen does not explicitly teach, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit.

However, Papadopoulos discloses an authoring system and method for computer based training that teaches, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit (see col.6, lines 6-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

Regarding claim 2, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura further discloses, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences

from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (Para.0146 and FIG 6).

Regarding claim 3, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Wen further teaches, a second examination chart forming section, wherein the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected (col.4, lines 57-63 and col.5, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by generating questions from the story in a multiple choice format in order to evaluate the user's ability to recall a given event when he/she is given some clue to trigger his/her memory.

Regarding claim 6, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura further discloses, in the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146).

Regarding claim 7, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura further discloses, a chart display section which displays the first examination chart and the second examination chart (FIG 3, label 124), a start instructing section which instructs the subject to start inputting the answers to the first examination chart and the second examination chart (Para.0141, lines 1-7), an answer time control section which prohibits the subject from inputting the answer when time elapsed after the start instructing section instructed to start inputting answer to the first examination chart reaches the first predetermined answer time limit in accordance with the first examination chart (Para.0178).

Papadopoulos further teaches, an answer time control section which prohibits the subject from inputting answer when time elapsed after the start instructing section instructed to start inputting the answer to the second examination chart reaches the second predetermined answer time limit in accordance with the second examination chart (col.6, lines 6-16).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also

based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Shimura further discloses,

Regarding claim 8, a result display section which displays a dementia degree inspection result obtained by the dementia degree inspecting section (FIG 3, label 127),

Regarding claim 9, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (Para.0173),

Regarding claim 10, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (FIG 9, label 135), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines a dementia degree of the subject from answers to both the first examination chart and second examination chart of the current subject obtained by the answer obtaining section (Para 0180, lines 6-14),

Regarding claim 11, from the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Wen further teaches, the dementia degree inspection section extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 1-8 and lines 58-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an evaluation engine such as grammar analysis engine in order to allow the system to efficiently identify the mistakes in the student response and display feedback regarding the error information or explanation to achieve the correct answer, so that the student effectively learns from his/her mistakes.

With regard to the claimed limitation "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general teaches evaluating the user based on correct response, incorrect response and oversight (see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 12, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Wen further teaches, plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (see e.g. col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (see col.6, lines 12-25).

Therefore, as already indicated with respect to claim 11, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an evaluation engine such as grammar analysis engine in order to allow the system to efficiently identify the mistakes in the student response and display feedback regarding the error information or explanation to achieve the correct answer, so that the student effectively learns from his/her mistakes.

Here also, with regard to the claimed limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the number of meaning grasps", Shimura in general teaches, determining the dementia degree based on correct response, incorrect response and oversight (FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is

as taught by the prior art, it requires only a routine skill in the art to include such additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 14, Shimura discloses the following claimed limitations; a dementia inspection server in a dementia inspection system comprising the dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), the dementia inspection server comprising a chart storing section which stores a first examination chart and a second examination chart (Para.0053), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination whether a color of the characters constituting the color word is the same color as the color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), wherein the answers to the first examination chart are to be made within a first predetermined answer time limit by the subject reading the inspection sentences(Para.0178), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (Para.0054), an answer receiving section which receives the answers to the first examination chart and the second examination chart from the dementia inspection client (Para.0055), and a dementia degree inspecting section which

examines a dementia degree representing a degree of dementia of the subject based on the answers obtained by the answer receiving section (Para.0056).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected; the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 20-26 and lines 57-63); the answers to the second examination chart are to be made by the subject based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart (see col.5, lines 58-67 and col.6, lines 1-12)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen does not explicitly teach, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit.

However, Papadopoulos discloses an authoring system and method for computer based training that teaches, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit (see col.6, lines 6-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Shimura further discloses:

Regarding claim 15, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (Para.0146 and FIG 6).

Regarding claim 16, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Wen further teaches, a second examination chart forming section, wherein the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected (col.4, lines 57-63 and col.5, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by generating questions from the story in a multiple choice format in order to evaluate the user's ability to recall a given event when he/she is given some clue to trigger his/her memory.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Shimura further discloses;

Regarding claim 19, in the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146),

Regarding claim 20, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (Para.0053), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines

a dementia degree of the subject from answers to both the first examination chart and second examination chart of the current subject obtained by the answer obtaining section (Para.0055 and Para.0056).

Regarding claim 21, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura further discloses, the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Wen further discloses, extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 54-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, and the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

With regard to the limitation, "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general discloses evaluating the user based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such

assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 22, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Wen further teaches, in plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (col.6, lines 12-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by presenting explanation to the user on the display regarding the questions that he/she answered incorrectly in order to help the user understand the correct answer and also retain the information learnt.

Regarding the limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the number of meaning grasps", here also Shimura in general discloses, determining the dementia degree based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is

as taught by the prior art, it requires only a routine skill in the art to include such additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Shimura further discloses,

Regarding claim 24, a result sending section which sends a dementia degree inspection result obtained by the dementia degree inspecting section to the dementia inspection client (FIG 21, label 717),

Regarding claim 25, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (FIG 21, label 718),

Regarding claim 26, Shimura discloses the following claimed limitations; a dementia inspection client in a dementia inspection system comprising a dementia inspection server and the dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection client comprises a chart receiving section which receives, from the dementia inspection server, a first examination chart and a second examination chart (Para.0058), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination whether a color of the characters constituting the color word is

the same color as the color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the answers to the first examination chart are to be made within a first predetermined answer time limit by the subject reading the inspection sentences (Para.0178), a chart display section which displays the first examination chart and the second examination chart received by the chart receiving section (Para.0059), an answer obtaining section which obtains the answers made within predetermined answer time limits for the first examination chart and the second examination chart displayed on the chart display section in accordance with an operation (Para.O060 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (Para.O061).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected; the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 20-26 and lines 57-63); the answers to the second examination chart are to be made by the subject based on a

memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart (see col.5, lines 58-67 and col.6, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen does not explicitly teach, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit.

However, Papadopoulos discloses an authoring system and method for computer based training that teaches, the answers to the second examination chart are to be made by the subject within a second predetermined answer time limit (see col.6, lines 6-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Shimura further discloses,

Regarding claim 28, a result receiving section that receives a dementia degree inspection result, which is obtained by the dementia inspection server based on the answers from the dementia inspection client and sent from the dementia inspection server (FIG 21, labels 717 and 725), and a result display section which displays the dementia degree inspection result received by the result receiving section (see FIG 21, label 726),

Regarding claim 29, Shimura further discloses, a start instructing section which instructs the subject to start inputting answers to the first examination chart and an answer time control section which prohibits the subject from inputting answer when the time elapsed after the start instructing section instructed to start inputting answer to the first examination chart reaches the first predetermined answer time limit in accordance with the first examination chart (Para.0178).

Papadopoulos further teaches, a start instructing section which instructs the subject to start inputting answers to the second examination chart and an answer time control section which prohibits the subject from inputting answer when the time elapsed after the start instructing section instructed to start inputting answer to the second examination chart reaches the second predetermined answer time limit in accordance with the first examination chart (col.6, lines 6-16).

Therefore, as already discussed above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the

invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

Regarding claim 31, Shimura discloses the following claimed limitations; a dementia inspection system comprising a dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection server comprises a first examination chart forming section which has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart to form a first examination chart (Para.0146 and Para.0154), a second examination chart forming section (Para.0053), which has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences (Para.0152 and Para.0154), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (see FIG 21, label 712), an answer receiving section which receives answers made within a first predetermined answer time limit to the first examination chart by the subject reading the inspection sentences (see FIG 21, label 713, and Para.0178), and a dementia degree inspecting section which determines a dementia degree representing a degree of

dementia of the subject based on the answers obtained by the answer receiving section (Para.0056), the dementia inspection client comprises a chart receiving section which receives the first examination chart and the second examination chart sent from the dementia inspection server (FIG 21, label 721), a chart display section which displays the first examination chart and the second examination chart received by the chart receiving section (FIG 21, label 722), an answer obtaining section which obtains the answers made within predetermined answer time limits for the first examination chart displayed on the chart display section in accordance with an operation, and which obtains the answers for the second examination chart displayed on the chart display section in accordance with an operation (FIG 21, label 723 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (FIG 21, label 724).

Shimura does not explicitly disclose, a second examination chart forming section which has plural kinds of question units each comprising a combination of questions concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected, and selects a predetermined number of question units, to form the second examination chart; the answer receiving section receives answers made by the subject within a second predetermined time limit to the second examination chart based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart from the dementia inspection client.

However, Wen discloses a method and system for learning language that teaches, a second examination chart forming section which has plural kinds of question units each comprising a combination of questions concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which are to be selected, and selects a predetermined number of question units, to form the second examination chart (see col.4, lines 20-26 and lines 57-63); the answer receiving section receives answers made by the subject to the second examination chart based on a memory of the subject obtained by reading the inspection sentences when the subject answers the first examination chart from the dementia inspection client (col.5, lines 58-67 and col.6, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen does not explicitly teach, the answer receiving section receives answers made by the subject within a second predetermined answer time limit to the second examination chart.

However, Papadopoulos discloses an authoring system and method for computer based training that teaches, an answer receiving section receives answers made by the subject within a second predetermined answer time limit to the second examination chart (col.6, lines 6-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Papadopoulos by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance.

- Claims 4, 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959, in view of Papadopoulos 6,099,320 and further in view of Braunberger 2003/0077559.

Regarding claims 4, 17 and 27, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above. Wen further teaches, the plural kinds of question units are associated with positions in the inspection sentences the dementia inspection apparatus further comprises a sentence range detecting section which detects a range of the inspection sentences with respect to the first examination chart (see e.g. col.4, lines 20-32), the second examination chart forming section selects a question unit associated with a position in the range detected by the sentence range detecting section in the inspection sentence, thereby forming the second examination chart (col.4, lines 57-64).

Shimura in view of Wen and further in view of Papadopoulos does not explicitly teach, a sentence range detecting section which detects a range of the inspection

sentences which the subject was able to read within the first predetermined answer time limit.

However, Braunberger discloses a method and apparatus for periodically questioning that teaches, a sentence range detecting section which detects a range of the inspection sentences which a subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen, in view of Papadopoulos and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

- Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031, in view of Wen 6,341,959, in view of Papadopoulos 6,099,320 and further in view of Polanyi 2003/0093275.

Regarding claims 5 and 18, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura further discloses, the color words in the character group of the inspection sentences are tinted with plural colors such that individual color word has characters of the same color (Para.0146).

Shimura in view of Wen and further in view of Papadopoulos does not explicitly teach, characters in the character group except the color words are tinted with a single color.

However Polanyi discloses systems and methods for dynamic reading instruction that teaches, characters in the character group except the color words are tinted with a single color (Para.0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen, in view of Papadopoulos and further in view of Polanyi by displaying explanatory sentences on the screen and coinciding the font color of the given word with its meaning in order to allow the user to clearly memorize such words by recalling their color, so that the user would be able to remember the meanings of the words even after some extended period of time.

- Claims 13, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959, in view of Papadopoulos 6,099,320 and further in view of McElwrath 2004/0009462.

Regarding claim 13, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations except for the described features utilized for a pre-test first examination chart and a pre-test second examination chart.

For instance Shimura discloses, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination whether a color of the characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error; the answer obtaining section obtains answers of the subject made within predetermined answer time limits to the first examination (Para.0178).

Wen further teaches, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 57-63), the dementia degree inspecting section determines the dementia degree which represents a degree of dementia of the subject based on the answers to the first examination chart and the second examination chart (col.6, lines 13-25).

Papadopoulos further teaches, the answer obtaining section obtains answers of the subject made within predetermined answer time limits to the second examination chart (col.6, lines 6-16).

Thus, as already discussed above, Shimura in view of Wen and further in view of Papadopoulos teaches the above claimed features except for the features being utilized for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen, in view of Papadopoulos and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Regarding claim 23, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations except for the features utilized for a pre-test first examination chart and a pre-test second examination chart.

For instance Shimura discloses, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the chart sending section sends the first examination chart and the second examination chart to the dementia inspection client (Para. FIG 21, label 712).

Wen further discloses, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 57-63).

Thus, as already discussed above, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations except for the features utilized for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen, in view of Papadopoulos and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Regarding claim 30, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations as discussed above.

Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations except for the features utilized for a pre-test first examination chart and a pre-test second examination chart.

For instance Shimura discloses, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the

same color, requires a determination whether a color of the characters constituting the color word is the same color as color represented by the color word (FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the dementia inspection client obtains through the answer obtaining section answers of the subject made within first predetermined answer time limits to the first examination chart and sends the obtained answers to the dementia inspection server (Para.0178).

Wen further teaches, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (see col.4, lines 57-63).

Papadopoulos further teaches, the dementia inspection client obtains through the answer obtaining section answers of the subject made within second predetermined answer time limits to the second examination chart and sends the obtained answers to the dementia inspection server (col.6, lines 6-16).

Thus, as already discussed above, Shimura in view of Wen and further in view of Papadopoulos teaches the claimed limitations except for the features utilized for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen, in view of Papadopoulos and further in view of McElwrath by incorporating a pre-

test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.

A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Claims 1, 8-10, 14, 20, 24-26 28 and 31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 11, 4, 12, 14, 15-18 and 25 of US patent 6,654,695. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed

features in the current application appear to be an obvious modification of the claims in the corresponding Patent.

For instance, claim 1 of US 6,654,695 recites similar structural features as claim 1 of the instant application 10/566395 except for specifying the contents of the first examination chart and the second examination chart, and the predetermined time limits associated with the charts.

However, as already discussed in the above section (see Claim Rejections - 35 USC § 103 based on publication US 6,654,695), it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of US 6,654,695 in view of Wen (US 6,341,959) and further in view of Papadopoulos (US 6,099,320) by incorporating questions that are related to a story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory; and also by incorporating an authoring application into the system in order to allow the user/teacher to set any specified time limit for any (or all) type of tests so that the system would evaluate the student's ability not only based on the accuracy of the response, but also based on the student's response time, so that the system would provide appropriate feedback to the student to further improve his/her performance. The same analysis is used for the above identified claims.

Response to Arguments.

4. Applicant's arguments filled on 04/30/2010 have been fully considered but they are not persuasive. In the remarks, Applicant argues that,

(1) Wen does not teach or suggest "the second examination chart having a combination of plural questions concerning contents of the inspection sentences." The examples provided in the portions of Wen, cited by the Examiner, do not even have the question marks . . . Wen teaches selecting a correct word from the presented selection of words, to thereby form a correct sentence. Accordingly, the Wen's subject does not need to remember the details of the story to select a correct answer, but rather needs to understand the meaning of the word as it is applicable to the sentence . . .

- In response to argument (1), the Examiner respectfully disagrees. The reference clearly teaches that different types of questions are generated from a paragraph of a given story. Note that as long as two or more questions are generated from the given paragraph, then that satisfies the term "plurality". For example, the reference teaches at least two different types of questions indicated as PROBLEM A and PROBLEM B (see col.5, lines 35-40 and col.6, lines 10-14).

In addition, one does not have to necessarily assume that the user in Wen's system does not have to remember the story to answer the question. For example, the user may not be familiar with any of the choices given except for the one he/she recalls reading in the story. That means, if the user remembers the sentence he/she has read in the story and recognizes the words used in that sentence, then he/she would be able to select the correct word (without necessarily knowing the meanings of any of the choices presented).

Furthermore, if the objective of Wen's system were only to determine whether the user knows the meaning of a given word as it is applicable to a given sentence, then

he/she would not be required to read the story. Therefore, Applicant's argument in this regard is not persuasive.

Applicant also argued that, "*The Examiner overlooks the fact that the present invention is for the inspection of dementia, and identifies the present invention as the same as a test (intellectual load) for intellectual training . . .*"

It appears that Applicant has failed to recognize the fact that for an apparatus or a device claim, the intended purpose of the apparatus or the device is not relied upon to PATENTABLY distinguish one invention from another. As long as the system of the prior art teaches or suggests the features of the claimed apparatus or device, and is capable of performing the functional limitations of the recited features, then it meets the claim(s). For example a given computer system may comprise a processor, a display and a storage medium; and the intended purpose of this system may be to store information. However, this same system can have another intended purpose such as to display information, since the system has the features needed for displaying information (even though the reference may not explicitly describe such intended purpose).

In the same way, the intended purpose of Wen's invention may be for teaching/learning a language. However, as it is indicated in the above section (*Claim Rejections - 35 USC § 103*), the reference teaches or suggests Applicant's currently presented claimed features (and is capable of performing the functional limitations recited in the current claims); and therefore, it meets the claims.

(2) Accordingly, Wen and Papadopoulos are not analogous art because these two references are not in the field of testing the dementia and are not reasonably pertinent with the problems of testing the dementia condition.

Further, the Examiner appears to believe that it is obvious to combine Shimura with Wen and Papadopoulos based on the fact that Shimura discloses usefulness of the inspection sentences of the first examination chart. But, from a point of view of checking the condition of dementia, a first test while reading sentences and a second test based on the memory obtained by reading the sentences make a brain of a subject work in a different way in each test . . .

- In response to argument (2), the Examiner respectfully disagrees. First of all, the combined references are related because they are all in the field of evaluating or assessing the ability of the user. For example, Shimura describes an invention that comprises an answer obtaining section that receives the user's response and judges whether the user's response is correct or not (e.g. Para.0025). Wen also describes an invention that presents questions to the user and evaluates the user's answer to determine whether the user has responded correctly or not (e.g. col.5, lines 1-10). Similarly, Papadopoulos also describes an invention that presents tests to the user (after presenting a training material) to determine whether the user can correctly answer the questions or not (e.g. see col.6, lines 35-45). Therefore, it is clear from the above brief analysis that the above combined references are all related.

Secondly, when modifying the primary reference based on the teachings of the secondary reference(s), the modification does not necessarily require whether the

secondary reference(s) explicitly teach the claimed invention; rather, the requirement is what the combined teaching would have suggested to one of ordinary skill in the art at the time of the invention was made. For example it has been held that the **test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references.** Rather, the test is **what the combined teachings of the references would have suggested to those of ordinary skill in the art.** See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicant further argued that Shimura does not teach or suggest that the multiple tests are useful from a point of view of checking the condition of dementia.

First of all, Shimura's invention is solely directed to dementia testing system; and the different tests and charts discussed in the reference are all directed to dementia tests. In fact the reference describes that the dementia tests are effective in finding an early stage of dementia (e.g. see Abstract).

Secondly, even if Applicant assumed that Shimura does not state that the tests are useful from a point of view of checking the condition of dementia (of course, the Examiner does not agree with this assumption for the reasons discussed above), the question here is not whether the reference explicitly states if the given system is useful or not; rather, the question one has to consider is whether the reference teaches or suggests the features recited in the current invention. However, it is apparent from the

above section (*Claim Rejections - 35 USC § 103*) that Shimura does teach or suggest Applicant's currently presented claimed features.

Therefore, the Examiner concludes that Applicant's argument in this regard is also not persuasive.

(3) As described in paragraph 12 of the specification of the present application, inspection sentences make it possible to obtain evaluation with respect to the attention distributing ability required to pick up color words representing colors from the inspection sentences, and evaluation with respect to the attention distributing ability required to determine whether color represented by a color word and color of the color word match with each other or not (the effect of the first examination chart) . . .

- In response to argument (3), the above argument appears to be directed to the specification rather than the claims. Note that claimed features are given their broadest reasonable interpretation in light of the disclosure without importing any limitation from the specification. For example it has been held that claims are given their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). **Limitations appearing in the specification but not recited in the claim are not read into the claim.** In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Thus, if Applicant requires a given claimed feature to have a particular interpretation, then that particular interpretation needs to be incorporated in the claim(s).

Nevertheless, as clearly indicated in the above sections, the combined teaching of the references does teach or suggest Applicant's currently presented claimed features.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this final office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI XUAN can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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